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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,142	01/22/2002	Joerg Blaessing	12406-020001 / P2001,0799	9188
26161	7590	06/03/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			SANTIAGO, MARICELI	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,142

Applicant(s)

BLAESSING ET AL.

Examiner

Mariceli Santiago

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,5,6,20 and 21 is/are allowed.
- 6) ☒ Claim(s) 1,4,7-9,11-16,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 10 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The Amendment, filed on March 11, 2004, has been entered and acknowledged by the Examiner.

Claims 1-21 are pending in the instant application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites "in which the second electrode film or second electrode strip is/are vapor-deposited through a shadow mask in process step C)", the recitation is considered indefinite since vapor deposition through a shadow mask is considered a non-contact deposition techniques, which contradicts the claimed limitation of "second electrode film being produced by means of a contact printing process" as stated in preceding independent claim 1,

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 7-9 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yu et al. (US 6,483,099).

Regarding claims 1, 4 and 15, Yu discloses a method (Fig. 3) with the following process steps,

A) a first electrode film (11') is produced on a substrate (14),

B) at least one functional layer (12) comprising organic EL materials is produced on the first electrode film (11'),

C) a second electrode film (13') is produced on the functional layer (12), the first and second electrode film being produced by means of a contact printing process (i.e., screen-printing, stamping, micro-contact printing) in the form of electrodes strips running perpendicular to each other (Page 9, lines 27-29, Fig. 3), alternatively, Yu acknowledges that the first and/or second electrodes can be manufactured by vapor deposition techniques.

Regarding claims 7 and 8, Yu discloses a method in which the functional layer is produced by a contact printing process (i.e. screen-printing).

Regarding claim 9, Yu discloses a method in which the functional layer is spin-coated (Page 24, lines 3-5).

Regarding claim 11, Yu discloses a method in which a substance that is selected from the following groups a) metal pastes, b) metal oxide pastes, and c) electrically conductive polymers is used for the first and/or second electrically conductive films or electrode strips (Page 18, lines 18-19).

Regarding claim 12, Yu discloses a method in which the groups comprise the following substances: a) pastes solders with tin, lead, or silver, b) indium-tin oxides pastes and c) polyaniline (PANI), polyethylenedioxythiophene (PEDOT), or mixtures of PEDOT and polystyrenesulfonic acid (PSS) (Page 18, lines 18-19).

Art Unit: 2879

Regarding claims 13 and 14, Yu discloses a method in which non-noble metal are used for the second electrode film or electrode strips, and in which calcium, barium and magnesium is used (Page 19, lines 17-23).

Regarding claim 16, Yu discloses a method in which a transparent substrate is used, and in which a transparent, electrically conductive first electrode film or electrode strips is/are produced (page 12, lines 11-18).

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al. (US 5,804,917).

Regarding claim 18, here the Applicant is claiming the product of an organic EL display including a method (i.e. a process) of making the electrode layers by contact printing, consequently, claim 18 is considered a "product-by-process" claim. In spite of the fact that a product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. Rather, is the product itself which must be new and not obvious (see MPEP 2113). Accordingly, Takahashi discloses an OLED display comprising a first electrode film on a substrate, at least one functional layer comprising organic EL materials on the first film and a second electrode film on the functional layer.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Katagiri et al. (US 4,714,323).

Regarding claim 19, here the Applicant is claiming the product of an organic EL display including a method (i.e. a process) of making the electrode layers by contact printing,

consequently, claim 19 is considered a "product-by-process" claim. In spite of the fact that a product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Accordingly, Katagiri discloses a liquid crystal display (fig. 4) comprising a first electrode film (102) on a substrate (101), at least one functional layer (103) on the first electrode film, a second electrode film (102a) on the functional layer, and spacers (201).

Allowable Subject Matter

Claim 2, 3, 5, 6, 20 and 21 are allowed.

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 5, and specifically comprising the limitation of in which spacers are produced in a process step B1) prior to process step C) and/or B), and in which the spacers in process C) prevent contact between the functional layer and a component of printer responsible for transferring the second electrode film.

Regarding claims 2, 3, 6, 20 and 21, claims 2, 3, 6, 20 and 21 are allowable for the reasons given in claim 5 because of their dependency status from claim 5.

Regarding claim 10, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 10, and specifically comprising the limitation of strip-shaped ridges with overhanging edge forms that run perpendicular to the first strips are

Art Unit: 2879

structured in a process step B2) prior to process steps B) and/or C), and in which a metal layer is applied overall in process step C), which is structured by the strip-shaped ridges as second electrode strips.

Regarding claim 17, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 17, and specifically comprising the limitation of the face of the substrate facing the observer is dulled in at least some areas.

Response to Arguments

Applicant's arguments, see Remarks, filed March 11, 2004, with respect to the rejection of claims 1, 4, 7-9 and 11-16 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection were found as stated in the rejection above.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WMg 5/28/04
Mariceli Santiago
Patent Examiner
Art Unit 2879